

REMARKS

Independent claims 1 and 11 have been amended. Withdrawn claims 8-10 and 18-24 have been canceled without prejudice, and Applicants reserve the opportunity to pursue the subject matter of the withdrawn claims in a divisional application. No new matter has been added. Accordingly, claims 1-7 and 11-17 are pending in this application.

Claims 1-7

Independent claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Dedoes (U.S. Patent No. 3,650,331). Applicants respectfully submit that Dedoes does not disclose each and every element of amended claim 1.

Dedoes describes a tractor 10 that is equipped to tow various implements, such as a set of "aerator units 92." (Col. 2, lines 65-70; Col. 3, lines 59-60.) Each aerator unit 92 includes soil penetration elements 116 connected to a circular steel band 112, which rotates about an axle shaft 94. (Col. 3, lines 64-70; Col. 4, lines 61-65.) Unlike independent claim 1, Dedoes does not disclose that the shafts 94 are "radially spaced apart by a separation distance." Rather, Deodes teaches that the axle shafts 94 should be "arranged in a side by side relationship" and positioned generally along the same axis (refer to side view in FIG. 1). (Col. 3, lines 63-64.)

Accordingly, Dedoes does not anticipate independent claim 1. Nor does Dedoes suggest modifications to achieve the apparatus described in claim 1. Indeed, as previously described, Deodes teaches that the aerator units 92 (including the axle shafts 92) should be "arranged in the side by side relationship." (Col. 3, lines 63-64.) Applicants respectfully submit that claim 1 is patentable over Dedoes. Dependent claims 2-7 are patentable for at least the same reasons.

Independent claim 1 was also rejected under 35 U.S.C. § 102(b) as being anticipated by McGuire (U.S. Patent No. 2,111,478). Applicants respectfully submit that McGuire does not disclose each and every element of amended claim 1.

McGuire discloses a machine for spiking the ground for aeration purposes. (Col. 1, lines 2-3.) The machine includes a drum 23 having spindles 28 on which the spikes 29 are "pivoted." (Col. 2, lines 5-12.) Unlike independent claim 1, McGuire does not teach that "each tine in the first set fully rotates about the first shaft relative to the carrier without interference from the second shaft." Instead, as shown in FIG. 1, McGuire teaches that the spindles 28 are spaced

closely together so that the spikes 29 are partially “pivoted” relative to the end discs 24 before encountering interference from the neighboring rods 40 (or inevitably encountering interference from the neighboring spindle 28), which prevents full rotation of the spikes 29 about the spindle 28 relative to the end discs 24. (FIG. 1; Col. 2, line 11.)

Accordingly, McGuire does not anticipate independent claim 1. Nor does McGuire suggest modifications to achieve the apparatus described in claim 1. As previously described, McGuire teaches that the spikes 29 do not fully rotate due to interference with the neighboring rods 40 so as to vertically orient the spikes as they approach the ground. (FIG. 1; Col. 2, line 11; Col. 3, lines 16-22.) Applicants respectfully submit that claim 1 is patentable over McGuire. McGuire claims 2-7 are patentable for at least the same reasons.

Regarding dependent claim 6 (and dependent claim 12), the Office Action asserted that McGuire’s vertically oriented spikes 29 would “inherently” remove a portion of soil from a ground surface. Applicants respectfully traverse. McGuire teaches that the spikes 29 are continuously maintained in a vertical orientation while engaged with the ground, thereby compacting the soil further into the ground—not necessarily removing the soil. (Col. 1, lines 24-26; Col. 2, lines 20-23; Col. 2, lines 38-46.) Simply put, the removal of soil from the ground is not “necessarily present” in McGuire’s vertically oriented spikes 29, so the Office Action’s assertion of “inherent” teaching is improper. MPEP § 2112(IV) (stating that inherency “may not be established by probabilities or possibilities”).

Claims 11-17

Independent claim 11 was rejected under 35 U.S.C. § 102(b) as being anticipated by Dedoes (U.S. Patent No. 3,650,331). Applicants respectfully submit that Dedoes does not disclose each and every element of amended claim 11.

Unlike independent claim 11, Dedoes does not disclose that the shafts 94 are “radially offset by a separation distance.” Rather, Dedoes teaches that the axle shafts 94 should be “arranged in a side by side relationship” and positioned generally along the same axis (refer to side view in FIG. 1). (Col. 3, lines 63-64.)

Accordingly, Dedoes does not anticipate independent claim 11, and Dedoes does not suggest modifications to achieve the apparatus described in claim 11. Applicants respectfully

submit that claim 11 is patentable over Dedoes. Dependent claims 2-7 are patentable for at least the same reasons.

Independent claim 11 was also rejected under 35 U.S.C. § 102(b) as being anticipated by McGuire (U.S. Patent No. 2,111,478). Applicants respectfully submit that McGuire does not disclose each and every element of amended claim 11.

Unlike independent claim 1, McGuire does not teach that any portion of the spike 29 “fully revolves about the first holding means relative to the carrier without interference from second soil fracturing means and without interference from the second holding means.” Instead, as shown in FIG. 1, McGuire teaches that the spindles 28 are spaced closely together so that the spikes 29 are partially “pivoted” relative to the end discs 24 before encountering interference from the neighboring rods 40 (or inevitably encountering interference from the neighboring spindle 28), which prevents full revolution of any portion of the spikes 29 about the spindle 28 relative to the end discs 24. (FIG. 1; Col. 2, line 11.)

Accordingly, McGuire does not anticipate independent claim 11, and McGuire does not suggest modifications to achieve the apparatus described in claim 11. Applicants respectfully submit that claim 11 is patentable over McGuire. McGuire claims 2-7 are patentable for at least the same reasons.

Enclosed is a \$395 check for the Request for Continued Examination fees. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: April 19, 2006



Michael T. Hawkins
Reg. No. 57,867

Fish & Richardson P.C., P.A.
60 South Sixth Street
Suite 3300
Minneapolis, MN 55402
Telephone: (612) 335-5070
Facsimile: (612) 288-9696